

PRODUCT DATA SHEET

SikaPlast® GL 3251

Polycarboxylic ether-based superplasticizer for the production of high quality ready-mix concrete

DESCRIPTION

SikaPlast® GL 3251 is an innovative second generation superplasticizer based on polycarboxylic ether (PCE) polymers and is specially engineered for ready-mixed concrete.

SikaPlast® GL 3251 is differentiated from conventional superplasticisers, such as those based on sulphonated naphthalene formaldehyde condensate in that it is based on a unique carboxylic ether polymer with long lateral chains. This greatly improves cement dispersion. At the start of the mixing process the same electrostatic dispersion occurs but the presence of the lateral chains, linked to the polymer backbone, generate a steric hindrance which stabilises the cement particles capacity to separate and disperse. This mechanism provides flowable concrete with greatly reduced water demand.

USES

SikaPlast® GL 3251 is used for the production of high quality ready-mixed concrete.

CHARACTERISTICS / ADVANTAGES

For the Ready-mix Producer:

- Capability of delivering high performance concrete at any time to the job site in place
- Production of a concrete with low water cement ratios with excellent workability retention properties.
- Single product for many application needs

For the Contractor / Applicator:

- Easier placing and faster strength development
- Improved concrete surfaces
- Guarantee to place the same concrete as specified and ordered from ready-mix plant

For the Engineer:

- Insurance that concrete meets original specification
- High quality durable concrete

PRODUCT INFORMATION

Packaging	SikaPlast® GL 3251 is available in 1000 litre IBC's.
Appearance / Colour	Brownish Liquid
Shelf Life	The shelf life is 12 months when stored correctly.
Storage Conditions	SikaPlast® GL 3251 should be stored out of direct sunlight and protected from extremes of temperature.
Density	1.065 - 1.085
pH-Value	4.5 – 6.5
Total Chloride Ion Content	“chloride-free” to EN 934-2
Recommended Dosage	The normally recommended dosage rate of SikaPlast® GL 3251 is: 0.5 to 1.5 litre per 100kg of total cementitious material.

Other dosages may be recommended in special cases according to the specific site conditions. In this case, please consult our Technical Services Department for advice.

Dispensing

SikaPlast® GL 3251 is a ready-to-use admixture to be added to the concrete as a separate component. Optimal result is obtained if SikaPlast® GL 3251 is poured into the concrete mix right after the addition of the first 80% of the mixing water, i.e. when all solids are wetted. Avoid adding the admixture to the dry aggregates.

SYSTEM INFORMATION

Compatibility

SikaPlast® GL 3251 is not compatible with Sikament RB superplasticizers. SikaPlast® GL 3251 is suitable for mixes containing:

- Microsilica (Silica Fume)
- Fly Ash (PFA)
- GGBS (ground granulated blast furnace slag)

BASIS OF PRODUCT DATA

All technical data stated in this Product Data Sheet are based on laboratory tests. Actual measured data may vary due to circumstances beyond our control.

FURTHER DOCUMENTS

No special requirements must be observed during use. Protection gloves and glasses are however recommended. SikaPlast® GL 3251 is non-flammable, non-toxic or irritant and is not subject to special transport requirements.

SikaPlast® GL 3251 contains no hazardous substances requiring labelling. For further information refer to the Material Safety Data Sheet.

LIMITATIONS

The occurrence of a surface layer with SikaPlast® GL 3251 is normal and will have no effect on the performance of the product.

ECOLOGY HEALTH AND SAFETY

LOCAL RESTRICTIONS

Please note that as a result of specific local regulations the performance of this product may vary from country to country. Please consult the local Product Data Sheet for the exact description of the application fields.

LEGAL NOTES

The information, and, in particular, the recommendations relating to the application and end-use of Sika products, are given in good faith based on Sika's current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with Sika's recommendations. In practice, the differences in materials, substrates and actual site conditions are such that no warranty in respect of merchantability or of fitness for a particular purpose, nor any liability arising out of any legal relationship whatsoever, can be inferred either from this information, or from any written recommendations, or from any other advice offered. The user of the product must test the product's suitability for the intended application and purpose. Sika reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

Sika South Africa (Pty) Ltd

9 Hocking Place,
Westmead, 3608
South Africa
Phone +27 31 792 6500
www.sika.co.za



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